

PHIL XXX
TOPICS IN SOCIAL EPISTEMOLOGY

ANTONIO MARIA CLEANI

OVERVIEW

The practices by which we acquire and transmit knowledge are messy, interdependent, and deeply embedded in social structures. Coordinating action requires us to reconcile our beliefs with the beliefs of those around us. Because no one can investigate everything firsthand, we rely on experts, institutions, and distributed systems of inquiry. Our informational environments shape what we come to believe, and the incentives that govern those environments can amplify or distort the truth.

Social epistemology is the branch of epistemology that studies precisely these social dimensions of knowledge. This course takes a deep dive into contemporary social epistemology, with a focus on topics of political significance. The course is organized into five units, each covering one such topic:

Judgment aggregation: How do we combine the beliefs of multiple individuals into a collective belief on which to base collective action? In democratic societies, a lot of belief aggregation happens via majoritarian procedures. How likely are these procedures to yield true beliefs, and what are the conditions under which they fail?

The structure of communication: How does who we can communicate with affect the beliefs of individuals and groups? How do the costs involved in communication shape the flow of information? Is more communication always better?

Polarization: How do different groups of people end up with radically different beliefs about the same topic? How do mistrust and pressure to conform contribute to polarization? Is polarization always irrational?

Disinformation: How do powerful actors manipulate information to shape public opinion, and how can we resist such manipulation? □

Institutional design: How can we design better institutions for knowledge production and dissemination? Are groups consisting entirely of rational individuals always rational? How does the diversity of perspectives and backgrounds in a group affect its ability to solve problems? Should knowledge workers be motivated exclusively by the pursuit of truth?

Another feature tying these topics together is that they are all amenable to formal treatment. We will approach them through the lenses of formal models, drawing

from frameworks such as formal judgment aggregation, epistemic networks, probability theory, and game theory. That said, the course is designed to be accessible independently of any prior mathematical training. Technical material will be gently introduced from first principles. You will be able to choose between more formal and more informal assignments, depending on your interests and background.

LEARNING OBJECTIVES

By the end of this course, you will be able to:

- Understand and critically evaluate key theories and concepts in social epistemology.
- Apply (mathematical) models to represent real-world epistemic phenomena.
- Solve technical exercises involving probability theory, formal models of judgment aggregation, probability theory, and game theory.
- Generalize the formal frameworks covered in class to novel problems and scenarios.
- Produce argumentative essays that engage with contemporary literature in social epistemology

ASSESSMENT

Description of Assignments. You will be assessed through a combination of Perusall annotations, biweekly take-home assignments, three short papers, a final term paper extending one of your short papers, and participation. Each of these components is described in more detail below.

Perusall Readings. Perusall is a collaborative active reading platform that allows you to publicly annotate the readings and engage in discussions with your classmates. Each week, you will be asked to read the assigned materials and make at least two substantive annotations. Substantive annotations include questions, comments, objections, and connections to other materials. You can choose to either annotate the text directly or respond to your classmates' annotations. Perusall annotations are automatically graded by the platform.

Take-Home Assignments. At the beginning of each week I will release two take-home assignments:

- A formal *problem set*. These will consist of exercises that test your understanding of the more technical material covered in the lectures and readings and/or your ability to apply it to real-world phenomena.
- An informal *quiz* consisting of short essay questions. While you will still need to some grasp of technical material to complete quizzes, the questions will focus on the philosophical interpretations of formal models and the results obtained through them, rather than on the inner working of the models themselves.

You must complete at least two take-home assignments on two different topics per unit. If you submit more, only your two best assignments per unit will be counted. Each assignment is due one week after it is released.

There is no minimum number of problem sets or quizzes that you need to complete; you can choose the type of assignment that best suits your interests and background. I recommend submitting a combination of quizzes and problem sets, as they will help you develop different skills. But you can get through the course by submitting only quizzes or only problem sets if you want to.

Short Papers. You will be asked to submit three short papers throughout the semester, each of approximately 1,500 words. Each short paper should be about a different topic, and the topics should come from different units. Each short paper is due [three days] after the unit covering the relevant topic is completed.

A selection of prompts will be provided, and you will be able to choose between informal and formally oriented prompts. You are also welcome to propose your own question, though you will need to get my approval before proceeding.

Final Term Paper. The final term paper will be due at the end of the semester and should be approximately 3000 words. Your final term paper should be an extension of one of your short papers. You will be expected to take into account any feedback you receive on the short paper and to expand on the ideas presented in it. Final papers are due on [date].

Participation. You are expected to regularly show up to class and demonstrate active engagement. One way to demonstrate active engagement is by asking questions during lectures and contributing to in-class discussion. But not everybody feels comfortable speaking up in class, and that is perfectly fine. You can also demonstrate active engagement by being particularly active on Perusall (regularly submitting more than two annotations per reading), reaching out to me with questions or comments via email, or attending office hours. I encourage you to show up to office hours at least once during the semester, even if you don't have any specific questions.

Grade Breakdown. Your preliminary grade will be computed as a weighted average of the following components:

- Perusall annotations: 10%
- Take-home assignments: 40%
- Short papers: 30%
- Final term paper: 15%
- Participation: 5%

Each component will be graded on a 100-point scale, and your final letter grade will be assigned according to the following scale:

Numerical Range	Letter Grade
95-100	A
90-94	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
60-69	D
0-59	F

COURSE POLICIES

Readings. I expect you to do the readings and post your Perusall annotations before our second meeting the week they are assigned. This will allow you to get the most out of our lectures and discussions.

The readings can get challenging. I do not expect you to understand and remember every single detail of every single reading. What I do expect is that you make a good-faith effort to engage with the material and, if you do get confused, try to make productive use of your confusion. Getting confused is a natural part of the learning process. Being able to comfortably sit with confusion and use it as a springboard for further inquiry are important skills to develop. If you find yourself getting confused, try to get clear on what exactly is confusing you and share it with others. And if something confuses you, chances are that it is also confusing other people. So sharing your confusion (e.g., as a Perusall annotation or in class) can be a great way to spark discussion and help everyone get clearer on the material.

Some of the readings will be more technical than others. I have done my best to select readings that can be understood without needing to grasp every technical detail. For example, many of the readings present their main philosophical contributions informally in the main text, while relegating the technical details to appendices. I am not expecting everyone to carefully read through these appendices, though I do encourage everyone to at least give it a shot. When appropriate, I will post supplementary lecture notes that provide gentler introductions to the technical material in the readings. You can read these either in place of technical appendices or as preliminary material in addition to them, depending on your interests and background.

Collaboration. I encourage you to collaborate with your classmates, within limits. For each take-home assignment, you can choose whether to work individually or in a group of up to three students. If you choose to collaborate, you can work on the exercises or quiz questions with your group, but

- (1) You must work together on the same type of assignment (i.e., either the problem set or the quiz).
- (2) You cannot be a member of more than one group, and you must not discuss or share your solutions with anyone outside your group;

- (3) You must write up your solutions independently and in your own words, mentioning the other members of your group in your submission.

Your collaboration group is not fixed once and for all. You can choose to work with different people on different assignments, and you can also choose to work individually on some assignments and in a group on others.

All members of a group should contribute meaningfully to each question in the take-home assignment to the best of their abilities. Working together on a three-question take-home assignment in a group of three does not mean doing one exercise each independently and then pooling together your solutions. Take-home assignments will be designed to be cumulative, with later questions building on earlier ones, to encourage you to work through the entire assignment together.

For short papers and the final term paper, you are encouraged to discuss the prompts and share ideas with anyone else in the class. However, you must write up your papers independently and not share your written work with anyone else.

Late Submissions. I have tried to design assessment for this class in a way that minimizes the chances you will need to ask for extensions. Since you only need to submit two take-home assignments per unit, you can choose to skip an assignment if you have a particularly busy week. Likewise, you can choose which units to write short papers on, so you can move those around to fit your schedule.

But I understand that even with proper planning, life can get in the way. To accommodate that, everybody gets 10 free extension days that they can use for any assignment *except for the final paper*, no questions asked. If you need to submit an assignment late, just let me know via email and tell me how many extension days you want to use. You can use as many extension days as you want on a single assignment, but once you run out of extension days you are not getting any extra ones, so save them for when you really need them.

Late submissions not covered by free extension days will be penalized by a deduction of 5 percentage points per day. For example, if you submit an assignment that would have received a grade of 85 two days late without using any extension days, your grade for that assignment will be 75.

Communication. The best way to get in touch with me outside of class and office hours is via email. I will do my best to respond to your emails within 24 hours during the week and within 48 hours on weekends. When writing to me, please include PHIL[xxx] in the subject line.

Artificial Intelligence. As a rule of thumb, you are permitted to use generative AI tools to assist with brainstorming, ask clarificatory questions, and providing feedback on your *own* ideas. You are *not* permitted to use generative AI tools to generate entirely new ideas for you, nor write or edit drafts for you.

When you ask for clarifications or feedback, each question you ask the model should show that *you've made an independent effort to answer the question on your own*, before asking the model for help. For example, you are not allowed to ask:

Explain to me the definition of concept X.

Instead, ask:

I'm a little confused about what this part of the definition of concept X means. My best guess is that it means this, because of such and so reasons. Do you think I'm on the right track?

This question shows that you made an independent effort to understand the definition and you're sharing your results with the AI. The AI is then helping you think through ideas that are ultimately your own.

Similarly, you are not allowed to ask:

Give me an argument for thesis X.

Instead, ask:

Here's my argument for thesis X. I'm a bit unsure whether premise P is too strong. What are some ways of weakening it?

Again, here you are giving a model a starting point based on your own ideas. The model then helps you build on these ideas.

Likewise, don't ask:

Solve this exercise for me.

Instead, ask:

Here's my best attempt at solving this exercise. I'm kinda stuck at step 5. I'm thinking I should attack it by doing X, because of such and such reasons. Do you think this is a good way to go about it?

If you choose to use AI, you must export and submit your conversations with the model alongside your written submission. In your writing, you must reference these conversations the way you would reference any other source. Use footnotes to indicate which conversation you are referencing. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity.

You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses. It is your responsibility to double check AI answers against traditional sources. You will be responsible for any errors or omissions made by the tool.

COURSE MATERIALS

Course materials consist of a combination of journal articles and supplementary lecture notes. All required reading will be made available on Perusall, and supplementary lecture notes will be posted on Brightspace.

The academic literature we will cover is listed below.

- Dietrich, F. and Spiekermann, K. [2019]. Jury Theorems. In M. Fricker, P. Graham, D. Henderson, and N. J. Pedersen, eds., *The Routledge Handbook of Social Epistemology*. Routledge.
- Dorst, K. [2023]. Rational Polarization. *Philosophical Review*, 132(3):355–458.
- Kitcher, P. [1990]. The Division of Cognitive Labor. *Journal of Philosophy*, 87(1):5–22.
- List, C. and Pettit, P. [2002]. Aggregating Sets of Judgments: An Impossibility Result. *Economics and Philosophy*, 18(1):89–110.
- Mayo-Wilson, C., Zollman, K. J. S., and Danks, D. [2011]. The Independence Thesis: When Individual and Social Epistemology Diverge. *Philosophy of Science*, 78(4):653–677.
- Mohseni, A., O'Connor, C., and Weatherall, J. O. [2022]. The Best Paper You'll Read Today. *Philosophical Topics*, 50(2):127–153.
- Pettit, P. [2001]. Deliberative Democracy and the Discursive Dilemma. *Noûs*, 35(s1):268–299.
- Rosenstock, S., O'Connor, C., and Bruner, J. [2017]. In Epistemic Networks, is Less Really More? *Philosophy of Science*, 84(2):234–252.
- Singer, D. J. [2018]. Diversity, Not Randomness, Trumps Ability. *Philosophy of Science*, 86(1):178–191.
- Weatherall, J. O. and O'Connor, C. [2020]. Endogenous Epistemic Factionalization. *Synthese*, 198(Suppl 25):6179–6200.
- Weatherall, J. O., O'Connor, C., and Bruner, J. P. [2018]. How to Beat Science and Influence People: Policymakers and Propaganda in Epistemic Networks. *British Journal for the Philosophy of Science*, 71(4):1157–1186.
- Weatherall, J. O. and O'Connor, C. [2021]. Conformity in scientific networks. *Synthese*, 198(8):7257–7278.
- Zollman, K. J. S. [2007]. The Communication Structure of Epistemic Communities. *Philosophy of Science*, 74(5):574–587.
- [2009]. The Epistemic Benefit of Transient Diversity. *Erkenntnis*, 72(1).

TENTATIVE SCHEDULE

Week	Topic	Readings
Judgment Aggregation		
Week 1	Truth and Democracy	Dietrich and Spiekermann [2019]
Week 2	The Doctrinal Paradox	Pettit [2001]
Week 3	Impossibility Results	List and Pettit [2002]
Communication		
Week 4	The Zollman Effect	Zollman [2007]
Week 5	Transient Diversity	Zollman [2009]
Week 6	Robustness	Rosenstock et al. [2017]
Polarization		
Week 7	Mistrust	Weatherall and O'Connor [2021]
Week 8	Conformity	Weatherall and O'Connor [2020]
Week 9	Rational Polarization	Dorst [2023]
Spring Break	No class	
Disinformation		
Week 11	Propaganda	Weatherall et al. [2018]
Week 12	Curation	Mohseni et al. [2022]
Week 13	Conspiracy Theories	
Institutional Design		
Week 14	The Independence Thesis	Mayo-Wilson et al. [2011]
Week 15	Diversity and Ability	Singer [2018]
Week 16	Division of Cognitive Labor	Kitcher [1990]
Study Days	No class	
Finals Week	No class	

[BOILERPLATE TEXT]